

# WORKFORCE DEVELOPMENT (CAREER AND TECHNICAL) EDUCATION

## Fundamentals Of Technology Education (8110) Objectives

1.01,1.02, 1.03, 1.05, 3.01, 3.02, 3.03,3.04, 3.05, 2.06, 6.02, 6.03

## EXAMINING SOLUTIONS TO ALTERNATIVE FUELS

Mr. Clark's class has been evaluating problem solving and trends in technology affecting the war on terrorism. Mr. Clark asks the students to discuss their idea on the war and how it will affect the United States' economy. After the class discussion the student will complete the following assignment.

The United States is in the midst of a war on terrorism that threatens our relationship with important oil producing nations like Saudi Arabia. Your class has been asked to develop a plan to reduce the nation dependence on oil. What technological solutions could we pursue to help our nation reduce its dependence on oil? Develop a plan using the DEAL problem solving method and the Universal System Model that will utilize our technological resources to decrease our dependence on oil. Students will present their plan to the class.

The Universal System model typically includes a look at system inputs, processes, and outputs for open loop systems and a fourth component, feedback, is included in systems that are perceived to be closed loops.

## Connections

This scenario allows students to use the research method to find information on alternative fuels and their impacts on society. Students will use the problem solving and Universal System Model to explain how their solution can be implemented in society. This scenario involves students in creative writing while having them plan, organize, and revise their ideas to create a report and oral presentation. The activity in this scenario will also allow the teacher to examine how well the students have mastered the problem solving method, Universal System Model and oral communication skills.